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10/585,528

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Jae-Wook Park

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EXAMINER

WRIGHT, MADISON L

ART UNIT

PAPER NUMBER

3781

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/585,528 | Applicant(s) PARK, JAE-WOOK | |
| | Examiner Madison L. Wright | Art Unit 3781 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/13/2006, 12/04/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to because the text in Figure 1 is difficult to read. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application

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must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because the abstract has more than 150 words. Correction is required. See MPEP § 608.01(b).
4. Claim 1 is objected to because of the following informalities: The word "of" in line 8 should be deleted to make the claim easier to read. After the word "to" in line 13 the word "be" should be added to make the claim more grammatically correct. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,109,469 to Clive-Smith ("Clive-Smith") in view of U.S. Patent No. 3,841,516 to März ("März").

As to claim 1, Clive-Smith teaches a buckling strength reinforced shipping container (freight container 1), comprising: an upper rail frame (top rail 4) and a

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lower rail frame (bottom rail 5), each having a rectangular frame shape (Fig. 6B), respectively mounted in an upper part and a lower part of the container (Fig. 1), and a plurality of corner posts (roof corner posts 6) to withstand vertical load by vertically connecting four corners of the upper rail frame to those of the lower rail frame, thereby forming a framework of the container (Fig. 1); a roof panel (roof structure 7) and a floor panel (floor 18) forming a ceiling and a bottom wall of the container, side panels (side walls 8) forming sidewalls, and a front panel (rear end doors 9) and a rear panel (front end wall 15) forming a front wall and a rear wall of the container either of being formed with a double door-type side opening/closing door (Fig. 1), all of which are formed with uneven surfaces (col. 4, lines 9-16) and combined in and between the upper rail frame and the lower rail frame; but does not teach buckling strength reinforcing frames each provided in an X-shaped arrangement on each of the front panel and the rear panel, and provided on the panel formed with the door being provided with a separated shape, so as to rotate with the door when the door is opened and closed, each terminal end of which is positioned in the corner portions, at which the corner posts and the upper and lower rail frames are connected together, thereby withstanding torsional load and angular load.

März teaches a shipping container that has brace elements 9, 10 that extend diagonally from each wing 3, 4 to the pertaining element for positively interconnecting the wings to add strength to the structure. The diagonally

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extending struts 9, 10 are welded to part of the fitting 11 that are in the corners of the wings as seen in Figure 1.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the diagonally extending struts connected to the fitting from März to the container as taught by Clive-Smith to add strength to the structure (März, abstract).

As to claim 2, modified Clive-Smith teaches the container as set forth in claim 1, wherein the buckling strength reinforcing frames are mounted by welding to the corner posts and to each of the upper and lower rail or to door panel, with both of which the terminal ends of the buckling strength reinforcing frames are in contact, as taught by März. The diagonally extending struts 9, 10 are welded to part of the fitting 11 that are in the corners of the wings as seen in Figure 1.

As to claim 4, Clive-Smith teaches a buckling strength reinforced shipping container (freight container 1), comprising: an upper rail frame (top rail 4) and a lower rail frame (bottom rail 5) having rectangular frames shape (Fig. 6B) respectively mounted in an upper part and a lower part of the container (Fig. 1), and corner posts (roof corner posts 6) to withstand vertical load by vertically connecting four corners of the upper rail frame to those of the lower rail frame together (Fig. 1), thereby forming a framework of the container, a roof panel (roof structure 7) and a floor panel (floor 18) forming a ceiling and a bottom wall, side panels (side walls 8) forming sidewalls, and a front panel (rear end doors 9) and a rear panel (front end wall 15) forming a front wall and a rear wall, all of which

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are formed with uneven surfaces (col. 4, lines 9-16) and combined in and between the upper rail frame and the lower rail frame; left and right doors (doors 29) provided in either of the front panel or the rear panel, one side of each of which is coupled by a hinge (hinges 23) to the corner posts (left-hand post 30 and right-hand post 31); but does not teach buckling strength reinforcing frames each provided in an X-shaped arrangement on each of the front panel and the rear panel, each terminal end of which is positioned in corner portions, at which the corner posts and the upper and lower rail frames are connected together, thereby withstanding torsional load and angular load, wherein the buckling strength reinforcing frame on the door is partitioned into left and right frames provided on the left and right doors based on an intersecting point of the left and right frames; and fastening means provided at the intersecting point of the left and right frames to selectively form a continuous structure using an engagement structure.

März teaches a shipping container that has brace elements 9, 10 that extend diagonally from each wing 3, 4 to the pertaining element for positively interconnecting the wings to add strength to the structure. The diagonally extending struts 9, 10 are welded to part of the fitting 11 that are in the corners of the wings as seen in Figure 1. März also teaches a plate 19 with recesses 20 that are associated with counter members 21 on gate wing 3 so when the wings are closed the counter members are firmly connected to the recesses.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the diagonally extending struts connected to the fitting and the plate with recesses and counter members from März to the container as taught by Clive-Smith to add strength to the structure (März, abstract).

As to claim 6, modified Clive-Smith teaches the container as set forth in claim 4, wherein the left and the right frames provided on the door are positioned on inner surfaces of the left and the right doors and mounted thereto through welding, and terminal ends thereof engage at intervals with the corner portions, at which the corner posts and the upper and lower rail frames are connected together, as taught by März. The diagonally extending struts 9', 10' are welded to the frame 13 on the inside of the door as seen in Figure 2.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clive-Smith as applied to claim 4 above, and further in view of U.S. Patent No. 3,385,655 to Huston et al. ("Huston").

As to claim 5, modified Clive-Smith teaches the container as set forth in claim 4, wherein the fastening means comprises: an engaging hole (recesses 20) having a depressed triangular shape, formed in one of the left and right frames based on the intersecting point of the buckling strength reinforcing frame provided on the door (Fig. 1); but does not teach an engaging device provided in a remaining one of the left and fight frames at a position facing the engaging

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hole, including an actuating bolt rotatably installed within a housing which is open toward the engaging hole, a manipulation lever coupled in worm and worm gear engagement with a first end of the actuating bolt, and an engaging part coupled by a screw with a second end of the actuating bolt and rectilinearly moving within the housing when the actuating bolt rotates, whereby a leading edge of the engaging part advances and comes into engagement with the engaging hole.

Huston teaches a motor 17 that will rotate the worm gear 11 through the worm wheel 66 which, in turn, move the screw 4 in or out along the post 2.

When the motor 17 moves the inner ends of arms 29 away from the door, the outer ends will release their clamping force on the under side of flange 90'.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the worm gear, worm wheel, screw, and motor of Huston with the container as taught by modified Clive-Smith to make a stronger closure for a shipping container.

8. Applicant is duly reminded that a complete response must satisfy the requirements of 37 C.F. R. 1.111, including: "The reply must present arguments pointing out the specific distinctions believed to render the claims, including any newly presented claims, patentable over any applied references. A general allegation that the claims "define a patentable invention" without specifically pointing out how the language of the claims patentably distinguishes them from the references does not comply with the requirements of this section. Moreover, "The prompt development of a clear Issue

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requires that the replies of the applicant meet the objections to and rejections of the claims." Applicant should also specifically point out the support for any amendments made to the disclosure. See MPEP 2163.06 and MPEP 714.02. The "disclosure" includes the claims, the specification and the drawings.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent No. 6,371,299 B1 to Essary discloses a crate assembly that has an x-shaped brace assembly.
- U.S. Patent No. 4,057,170 to Dougherty discloses a cargo container door that has stiffener grooves.
- U.S. Patent No. 2,317,985 to Fitch discloses a freight container that has x-shaped supports to strengthen the container.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madison L. Wright whose telephone number is 571-270-7427. The examiner can normally be reached on Monday thru Friday, 8:00 to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anthony D Stashick/
Supervisory Patent Examiner, Art
Unit 3781

/M. L. W./
Examiner, Art Unit 3781